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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/939,076	08/24/2001	Brenor L. Brophy	5298-06200CD01058	4232

35617 7590 10/19/2004

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EXAMINER	
DUNCAN, MARC M	

ART UNIT	PAPER NUMBER
2113	

DATE MAILED: 10/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/939,076	BROPHY ET AL.
	Examiner	Art Unit
	Marc M Duncan	2113

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 July 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *9-20* is/are allowed.

6)☒ Claim(s) *1-3 and 5-8* is/are rejected.

7)☒ Claim(s) *4* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *24 August 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Status of the Claims

Claims 6-8 are rejected under 35 USC 112, second paragraph.

Claims 1-2 and 6 are rejected under 35 USC 102(e).

Claims 3 and 5 are rejected under 35 USC 103(a).

Claim 4 is objected to.

Claims 9-20 are allowed.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 6-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 recites the limitation "the controller" in line 1. Claim 6 recites the limitation "the clock signal and mode select signal" in line 2. Claim 7 recites the limitation "the shift register" in line 1. Claim 8 recites the limitation "clock signal and mode select signal" in line 1. There is insufficient antecedent basis for these limitations in the claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –

> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-2 and 6 are rejected under 35 U.S.C. 102(e) as being anticipated by Shokouhi.

Regarding claim 1:

Shokouhi teaches multiple integrated circuits, each having a plurality of input pins adapted to receive a parallel delivered signal adapted for controlling the corresponding integrated circuit in Fig. 1, Fig. 2 and col. 3 lines 40-43.

Shokouhi teaches a single access port adapted to receive a serial bit stream of data and convert the serial bit stream into the parallel delivered signal selectively placed onto the plurality of input pins of each of said multiple integrated circuits in Fig. 1, Fig. 2 and col. 3 lines 40-43.

Regarding claim 2:

Shokouhi teaches wherein the serial bit stream is derived from a host computer operating from an application program compatible with IEEE Std. 1149.1 in Fig. 1 and Fig. 2. In order to communicate with the JTAG interface, the host is necessarily compatible with IEEE Std. 1149.1 (the JTAG standard).

Regarding claim 6:

Shokouhi teaches the controller producing an enable signal upon receiving the clock signal and mode select signal compatible with IEEE Std. 1149.1 in Fig. 1, Fig. 2,

and col. 3 lines 29-37. The JTAG circuit generates control signals (the enable signal of the claim) in response to TDI (data), TMS (mode select) and TCK (clock signal).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shokouhi in view of Lacey et al.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed

in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(l)(1) and § 706.02(l)(2).

Regarding claim 3:

The teachings of Shokouhi are outlined above.

Shokouhi does not explicitly teach the JAM Standard Test and Programming Language (STAPL). Shokouhi does, however, teach a JTAG interface, and therefore teaches the using of a JTAG programming language inherently.

Lacey teaches the JAM Standard Test and Programming Language (STAPL) in claim 12.

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the programming language of Lacey with the JTAG interface of Shokouhi.

One of ordinary skill in the art at the time of invention would have been motivated to combine the teachings because it is necessary to use a JTAG programming

language when using a JTAG interface such as that of Shokouhi. Lacey provides such a JTAG programming standard to meet the need of Shokouhi.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shokouhi in view of Play-Hookey.

Regarding claim 5:

Shokouhi teaches an instruction register couple to receive the serial bit stream from a host computer in Fig. 3(A).

Shokouhi teaches a controller coupled to receive a clock signal and mode select signal from the host computer in Fig. 3(A).

Shokouhi teaches a serial to parallel interface to receive the serial bit stream and convert the serial bit stream into the parallel delivered signal dependent on the state of the clock signal and mode select signal received upon the controller in Fig. 1, Fig. 2 and col. 3 lines 29-43.

Shokouhi does not explicitly teach the interface being a shift register. Shokouhi does, however, teach a serial to parallel interface.

Play-Hookey teaches the interface being a serial to parallel shift register in the entire document.

It would have been obvious to one of ordinary skill in the art at the time of invention to combine the shift register of Play-Hookey with the interface of Shokouhi.

One of ordinary skill in the art at the time of invention would have been motivated to combine the teachings because the shift register of Play-Hookey meets the express

need of Shokouhi to convert a serial input to a parallel output in the serial to parallel interface.

Allowable Subject Matter

Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Prior art was not found that explicitly teaches or fairly suggests the access port residing on one of the circuits to which the parallel signal is delivered as outlined in claim 4. Prior art was not found that explicitly teaches or fairly suggests the integrated circuit being absent circuitry compatible with IEEE Std. 1149.1 as outlined in claim 9. Prior art was not found that explicitly teaches or fairly suggests a shift register that is non-compliant with IEEE Std. 1149.1 as outlined in claim 17. These limitations are considered allowable only in combination with all limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments with respect to claims 1-7 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art not relied upon contains elements of the instant claims and/or represents a current state of the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc M Duncan whose telephone number is 571-272-3646. The examiner can normally be reached on M-T and TH-F 6:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on 571-272-3645. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

md

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